



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

OCT 22 2015

CERTIFIED MAIL 7014 0150 0000 2452 5301 RETURN RECEIPT REQUESTED

Mr. Ivan D. Caldwell
Site Manager
DuPont Pontchartrain
586 LA Highway 44
LaPlace, LA 70068-6912

RE: DuPont Pontchartrain Final UIC Petition Reissuance Approval Decision for Wells 4, 7 & 8.

Dear Mr. Caldwell:

Effective the date of this letter, the Environmental Protection Agency (EPA) approves DuPont's request for the reissuance of an exemption to the land disposal restrictions for Wells 4, 7, and 8 at the DuPont Pontchartrain Site in LaPlace, Louisiana.

The land disposal restrictions prohibit the injection of hazardous waste unless a petitioner can demonstrate to EPA, to a reasonable degree of certainty, that there will be no migration of hazardous constituents from the injection zone for as long as the wastes remain hazardous. The land disposal restrictions for injection wells codified in 40 CFR Part 148 provide the standards and procedures by which petitions to dispose of an otherwise prohibited waste by injection will be reviewed and by which exemptions pursuant to these petitions will be granted or denied. Part 148 also provides for the reissuance of an exemption if the reissuance complies with the above-mentioned standards.

A letter dated August 13, 2015, informed DuPont that EPA was proposing to approve its petition reissuance request for an exemption to the land disposal restrictions. The public comment period associated with this decision began on August 19, 2015, and closed on October 5, 2015. No comments were received.

Based on a detailed technical review of the petition reissuance request and support documents, EPA has determined that this information for the DuPont Pontchartrain site meets the requirements of 40 CFR Part 148 by demonstrating that, to a reasonable degree of certainty, there will be no migration of hazardous constituents from the injection zone for 10,000 years.

The following are conditions of this land disposal restrictions exemption reissuance.

Petition Reissuance Approval Conditions

This approval of a petition for reissuance of an exemption to allow the continued injection of restricted hazardous wastes is subject to the following conditions, which are necessary to assure that the standard in 40 CFR §148.20(a) is met. Noncompliance with any of these conditions is grounds for termination of the exemption in accordance with 40 CFR §148.24(a)(1). This exemption is applicable to the DuPont injection Wells, 4, 7, and 8, located at the Pontchartrain site in LaPlace, Louisiana.

1. Injection of restricted waste shall be limited to the following injection zone:

<u>Well</u>	<u>Depth of Injection Zone</u>
4	3200' - 8550' ¹
7	3224' - 8550' ²
8	3200' - 8550' ³

¹Well 4 Injection Zone depths are referenced to Kelly Bushing (KB) depths on Well 4's Induction-Electrical log dated 9/17/69. Note that Well 4's lowermost Injection Zone depth is approximate as it is below Well 4's total depth.

²Well 7 Injection Zone depths are referenced to KB depths on Well 7 sidetrack #3's Platform Express Array Induction/GR/SP Neutron/Density log dated 3/20/07. Note that Well 7's lowermost Injection Zone depth is approximate as it is below Well 7's total depth

³Well 8 Injection Zone depths are referenced to KB depths on Well 8's Induction-SFL log dated 7/29/88.)

The injection intervals shall be defined by the following correlative log depths:

<u>Well</u>	<u>Injection Intervals</u>	<u>Depth of Injection Interval</u>
4	4700-Foot Sand	4760' - 5000' ¹
	6300-Foot Sand	6299' - 6512' ³
7	4700-Foot Sand	4801' - 5030' ²
	6300-Foot Sand	6299' - 6512' ³
8	7700-Foot Sand	7688' - 7894' ³
	8000-Foot Sand	7970' - 8240' ³

¹Well 4 4700-Foot Sand depths are referenced to Kelly Bushing (KB) depths on Well 4's Induction-Electrical log dated 9/17/69.

²Well 7 4700-Foot Sand depths are referenced to KB depths on Well 7 sidetrack #3's Platform Express Array Induction/GR/SP Neutron/Density log dated 3/20/07.

³Well 4 and Well 7 6300-Foot Sand depths and Well 8 7700-Foot and 8000-Foot Sands depths are referenced to KB depths on Well 8's Induction-SFL log dated 7/29/88.)

2. For Wells 4, 7, and 8, the cumulative monthly volume injected into each of the injection intervals shall not exceed that calculated as follows*:

4700-Foot Sand: (760 gpm)(1440 minutes/day)(number of days in that month) for wells 4 and 7 combined

6300-Foot Sand: (760 gpm)(1440 minutes/day)(number of days in that month) for wells 4 and 7 combined

7700-Foot Sand: (600 gpm)(1440 minutes/day)(number of days in that month) for well 8

8000-Foot Sand: (600 gpm)(1440 minutes/day)(number of days in that month) for well 8

*Only 1 injection interval can be used at a time in each well during its operational life

3. The facility shall cease injection into Wells 4, 7, and 8 by December 31, 2050.
4. The facility shall cease injection into individual injection intervals whenever the following cumulative injection volume limits are reached as shown in the following table or by December 31, 2050, whichever occurs first (see Condition 3).

<u>Injection Interval</u>	<u>Cumulative Injection Volume Limit¹</u>
4700-Foot Sand	5,996,000,000 gallons
6300-Foot Sand	5,996,000,000 gallons
7700-Foot Sand	5,996,000,000 gallons
8000-Foot Sand	5,996,000,000 gallons

(¹Based on cumulative injection into each interval for January 1, 2013, to December 31, 2050)

5. The characteristics of the injected waste stream shall for Wells 4, 7, and 8 at all times shall conform to those discussed in Section 6 of the 2015 Petition Reissuance document for Wells 4, 7, and 8. The three-whole calendar month volume weighted surface density of the waste stream injected into each interval shall remain within a range from 1.075 to 1.194 gm/cm³ at 70°F and 1 atmosphere. The three-whole calendar month volume weighted density average for each interval shall be calculated by multiplying each day's density value by that day's injected volume into each interval, totaling those values for the three-whole calendar month period, and dividing by that three-whole calendar month injected volume. For the purpose of the above calculation, each day's density value shall be obtained by at least one representative grab sample or 24 hour composite sample for each active injection interval.
6. The approval for injection is limited to the following hazardous wastes:

D001, D002, D003, D004, D005, D006, D007, D008, D009, D010, D011, D012, D013, D014, D015, D016, D017, D018, D019, D020, D021, D022, D023, D024, D025, D026, D027, D028, D029, D030, D031, D032, D033, D034, D035, D036, D037, D038, D039, D040, D041, D042, D043

F001, F002, F003, F004, F005, F006, F024, F025, F039 (for constituents listed in Table 3-11)

K009, K010, K014, K015, K016, K017, K018, K019, K020, K021, K022, K023, K024, K025, K026, K028, K029, K030, K031, K032, K033, K034, K035, K036, K037, K038, K039, K040, K041, K042, K043, K048, K049, K050, K051, K052, K054, K083, K084, K093, K094, K095, K096, K097, K098, K099, K101, K102, K103, K104, K188

P001, P002, P003, P004, P005, P007, P008, P013, P014, P016, P017, P018, P020, P021, P022, P023, P024, P026, P027, P028, P029, P030, P031, P033, P034, P036, P037, P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048, P049, P050, P051, P054, P057, P058, P059, P060, P062, P064, P066, P067, P068, P069, P070, P071, P072, P075, P076, P077, P078, P079, P080, P081, P082, P083, P084, P085, P088, P089, P097, P098, P099, P101, P102, P103, P104, P105, P106, P116, P118, P123

U001, U002, U003, U004, U005, U006, U007, U008, U009, U010, U011, U012, U014, U015, U016, U017, U018, U019, U021, U022, U024, U025, U026, U027, U028, U031, U034, U035,

U036, U037, U038, U039, U041, U042, U044, U045, U046, U047, U048, U049, U050, U051, U052, U053, U055, U056, U057, U058, U059, U060, U061, U062, U063, U064, U066, U069, U070, U071, U072, U073, U074, U076, U077, U078, U079, U080, U081, U082, U083, U084, U085, U086, U087, U088, U089, U090, U091, U092, U093, U094, U095, U097, U098, U099, U101, U102, U103, U104, U105, U106, U107, U108, U109, U110, U111, U112, U113, U114, U115, U116, U117, U118, U119, U121, U122, U123, U124, U125, U126, U127, U128, U129, U130, U131, U132, U136, U137, U140, U141, U142, U147, U148, U149, U150, U151, U152, U153, U154, U155, U156, U157, U158, U159, U161, U162, U163, U164, U165, U166, U167, U168, U169, U170, U171, U172, U173, U174, U176, U177, U178, U179, U180, U181, U182, U183, U184, U185, U186, U187, U188, U190, U191, U192, U193, U194, U196, U197, U200, U201, U202, U203, U210, U211, U213, U218, U219, U220, U221, U222, U226, U227, U228, U230, U231, U232, U233, U235, U238, U239, U240, U242, U243, U244, U247, U271, U372

7. The facility must petition for approval to inject additional hazardous wastes which are not included in Condition No. 6, above. The facility must also petition for approval to increase the concentration of any waste which would necessitate the recalculation of the limiting concentration reduction factor and the extent of the waste plume. Petition reissuances and modifications should be made pursuant to §148.20 (e) or (f).
8. DuPont shall annually submit to EPA the results of a bottomhole pressure in each active injection interval. For injection intervals with more than a single well completed in it, DuPont will, at a minimum, submit the results of a bottomhole pressure survey in one well and demonstrate interwell communication with the other well. These surveys shall be performed after shutting in each well for a period of time sufficient to allow the pressure in the injection interval to reach equilibrium, in accordance with §146.68(e)(1). The annual report should include a comparison of reservoir parameters determined from the falloff test with parameters used in the approved no migration petition. DuPont shall also annually submit to EPA a tabulation of cumulative injection volumes into each injection interval beginning with data from January 1, 2013, so EPA can verify compliance with Condition No. 4 above. DuPont shall also annually submit to EPA a radioactive tracer survey and annulus pressure test for Wells 4, 7, and 8.
9. DuPont shall notify EPA in the event that Wells 4, 7, or 8 lose mechanical integrity, prior to any well work on Wells 4, 7, or 8, or if DuPont plans to plug Wells 4, 7, or 8. If any well work or plugging is being planned, DuPont shall also submit the procedures to EPA for review prior to commencing any work.
10. Upon the expiration, cancellation, reissuance, or modifications of the Louisiana Department of Natural Resources Underground Injection Control permit for Wells 4, 7, or 8, this exemption is subject to review. A new demonstration may be required if information shows that the basis for granting the exemption is no longer valid under 40 CFR §148.23 and §148.24.

In addition to the above conditions, this approval of a petition for reissuance of an exemption is contingent on the validity of the information submitted in the DuPont petition reissuance request for an exemption to the land disposal restrictions. This final reissuance decision is subject to termination when any of the conditions occur which are listed in 40 CFR §148.24, including noncompliance, misrepresentation of relevant facts, or a determination that new information shows that the basis for approval is no longer valid.

If you have any questions or comments, please call Brian Graves at (214) 665-7193 or email him at graves.brian@epa.gov.

Sincerely yours,



William K. Honker, P.E.

Director

Water Quality Protection Division

ecc: Mr. Doug Melancon, DuPont Pontchartrain
Mr. Steve Lee, LDNR

If you have any questions or comments, please call Brian (number) or email him at
brian@brian.org

Sincerely yours,



William K. Hanks, Jr.

Director

Water Quality Protection Division

cc: Mr. Doug Robinson, Bureau of Reclamation
Mr. Steve Lee, LIDR